

Remarks

This Application has been carefully reviewed in light of the Office Action mailed August 26, 2004, reopening prosecution of the present Application. Applicant appreciates the Examiner's reopening of prosecution and reconsideration of the Application. Applicant believes all pending claims are allowable over the references of record without amendment. Applicant has made clarifying amendments to Claims 12 and 36; however, these amendments have not narrowed the claims and are not considered necessary for patentability. Applicant respectfully requests reconsideration and allowance of all pending claims.

I. Claims 12 and 36 Recite Patentable Subject Matter

The Examiner rejects Claims 12 and 36 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully disagrees.

The patent laws define patentable subject matter as "any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereto." *See* 35 U.S.C. § 101. When an abstract idea is reduced to a practical application, the abstract idea no longer stands alone if the practical application of the abstract idea produces a useful, concrete, and tangible result. This then satisfies the requirements of 35 U.S.C. § 101. *See In re Alappat*, 33 F.3d 1526, 1544, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994); *see also State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, 47 U.S.P.Q.2d 1596, 1601-02 (Fed. Cir. 1998). While an abstract idea by itself may not satisfy the requirements of 35 U.S.C. § 101, an abstract idea when practically applied to produce a useful, concrete, and tangible result satisfies 35 U.S.C. § 101. *See AT&T Corp. v. Excel Comm. Inc.*, 172 F.3d 1352, 1357, 50 U.S.P.Q. 1447, 1452 (Fed. Cir. 1999) (stating that as technology progressed, the CCPA overturned some of the earlier limiting principles regarding 35 U.S.C. § 101 and announced more expansive principles formulated with computer technology in mind); *see also In re Musgrave*, 431 F.2d 882, 167 U.S.P.Q. 280 (CCPA 1970) (cited by the Federal Circuit in *AT&T Corp.*, 172 F.3d at 1356). Thus, producing a useful, concrete, and tangible result is the key to patentability according to *State Street* and other applicable case law.

"Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." M.P.E.P. § 2106. Indeed, a method or process remains statutory even if some or all of the steps therein can be performed in the human mind, with the aid of the human mind, or because it may be necessary for one performing the method or process to think. *See In re Musgrave*, 431 F.2d at 893, 167 U.S.P.Q. at 289. As stated by the Federal Circuit in *State Street* and as explicitly confirmed in the M.P.E.P., "[T]ransformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete, and tangible result' -- a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." *State Street*, 149 F.3d at 1373, 47 U.S.P.Q.2d at 1601-02; M.P.E.P. § 2106. As discussed below, Applicant's claims clearly recite a useful, concrete, and tangible result and are therefore directed to patentable subject matter.

As an example, prior to the amendments presented in the current Response, independent Claim 12 was directed to a "method for associating target data with a product classification schema, comprising" the limitations recited in the body of the claims. Prior to the amendments presented in the current Response, the method was recited as comprising:

- accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;
- accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;
- determining one or more classes of the first schema with which at least a portion of the target data should be associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and
- associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated.

Thus, even prior to the amendments presented in the current Response, “associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated” was one practical application of independent Claim 12, the useful, concrete, and tangible result being the association of the at least a portion of the target data with one or more classes of the first schema.

As another example, even prior to the amendments presented in the current Response, independent Claim 36 was directed to a “method for associating target data with a product classification schema, comprising” the limitations recited in the body of the claims. Prior to the amendments presented in the current Response, the method was recited as comprising:

- accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes;
- accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;
- determining one or more classes of the first schema with which at least a portion of the target data should be associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema; and
- associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated, the target data being associated with the classes of the first schema using one or more pointers to the target data.

Thus, even prior to the amendments presented in the current Response, “associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated, the

target data being associated with the classes of the first schema using one or more pointers to the target data” was one practical application of independent Claim 36, the useful, concrete, and tangible result being the association of the at least a portion of the target data with one or more classes of the first schema.

Additionally, the Examiner cites *Ex parte Bowman*, 61 U.S.P.Q.2d 1669 (Bd. Pat. App. & Inter. 2001) in support of the patentable subject matter rejections. (Office Action, Page 4) Applicant does not see the relevance of this particular decision. The patent application under appeal in *Bowman* was held unpatentable as being directed to non-statutory subject matter because the disclosed and claimed invention was directed to nothing more than a human making mental computations and manually plotting the results on a paper chart. *See Bowman*, 61 U.S.P.Q.2d at 1671. The claims of the patent application in *Bowman* included no reference to a computer system or any computer-related function. Indeed the specification of the patent application did not even recite the use of a computer system. *See Id.* These facts were apparently important to the Board, which stated, “Appellant has carefully avoided tying the disclosed and claimed invention to any technological art or environment.” *Id.* The Board found that the invention was “nothing more than an abstract idea which is not tied to any technological art, environment, or machine, and is not a useful art as contemplated by the Constitution of the United States. The physical aspects of claim 1, which are disclosed as nothing more than a human manually drawing a chart and plotting points on this chart, do not automatically bring the claimed invention within the technological arts.” *Id.*

In contrast to the patent application that was the subject of review in *Bowman*, Applicant’s independent Claim 12 specifically recites (both currently and prior to amendments presented in this Response):

- determining one or more classes of the first schema with which at least a portion of the target data should be associated based on ***an automatic comparison***, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and
- associating the at least a portion of the target data with one or more classes of the first schema in response to determining, ***based on the automatic comparison***, the

one or more classes of the first schema with which the at least a portion of the target data should be associated.

Similarly, in contrast to the patent application that was the subject of review in *Bowman*, Applicant's independent Claim 36 specifically recites (both currently and prior to amendments presented in this Response):

- determining one or more classes of the first schema with which at least a portion of the target data should be associated ***based on an automatic comparison***, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema, ***the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema***; and
- associating the at least a portion of the target data with one or more classes of the first schema in response to determining, ***based on the automatic comparison***, the one or more classes of the first schema with which the at least a portion of the target data should be associated, the target data ***being associated*** with the classes of the first schema ***using one or more pointers to the target data***.

Additionally, Applicant notes that the Specification is replete with descriptions of the use of computer systems to perform various steps and functionality recited in Applicant's claims. Thus, the facts in *Bowman* are in no way analogous to the facts in the present case.

Furthermore, the Examiner states, "In the present case, although claims 12 and 36 both recite an abstract idea at the preamble for associating target data with a product classification schema, however, the steps in the claim body merely [recite] applying a classification taxonomy schema to associate target data with a plurality of product attributes, which can be implemented by the mind of a person or by the use of a pencil and paper. In other words, since the claimed invention, as a whole, is not within the technological arts as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus it is deem[ed] to be directed to non-statutory subject matter." (Office Action, Pages 4-5) Applicant respectfully disagrees with the Examiner's position. First, with respect to both Claims 12 and 36, the claims, both currently and prior to the amendments presented in this Response, recited making a determination based on an automatic comparison, which clearly could not be implemented

“by the mind of a person or by the use of a pencil and paper.” Second, Claim 36 (both currently and prior to the amendments presented in the present Response) recites “the values being stored in one or more seller databases and identified by one or more pointers associated with one or more classes of the first schema” and “the target data being associated with the classes of the first schema using one or more pointers to the target data.” The use of databases and pointers clearly could not be implemented “by the mind of a person or by the use of a pencil and paper.”

In any event, although Applicant believes Claims 12 and 36 are directed to patentable subject matter without amendment for the reasons set forth above, Applicant has amended independent Claims 12 and 36 to further clarify that these claims each recite computer-implemented methods performed using one or more computer systems and are directed to patentable subject matter. None of these amendments are considered narrowing or necessary for patentability.

For at least these reasons, Applicant respectfully requests that Examiner to withdraw the rejections of Claims 12 and 36 under 35 U.S.C. § 101.

II. Claims 1-37 are Allowable Under 35 U.S.C. § 112, Second Paragraph

The Examiner rejects Claims 1-37 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

“The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with the information known in the art without undue experimentation.” M.P.E.P. § 2164.01 citing *United States v. Teletronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988). There is no requirement that the specification provide concrete examples or illustrations of claimed steps. In fact, “[c]ompliance with the enablement requirement of 35 U.S.C. 112, first paragraph, does not turn on whether an example is disclosed.” M.P.E.P. § 2164.02. All that is required is that the “information contained in the disclosure of an application must be sufficient to inform those skilled in the relevant art how to both make and use the claimed invention. Detailed procedures for making and using the invention may not be necessary if the description is sufficient to permit those

skilled in the art to make and use the invention.” M.P.E.P. § 2164. Applicant respectfully submits that the Specification provides sufficient information and detail to enable those skilled in the art at the time of invention to make and use the claimed invention. Applicant addresses the Examiner's particular objections below. In addressing each of the Examiner's particular objections, Applicant refers to example descriptions within the Specification; however, reference to these portions of the Specification should not be used to limit Applicant's claims.¹

The Examiner states that as to Claims 1, 12, 23, and 34-37, “the claimed ‘a first product classification schema’ and ‘a second product classification schema’ are new matters, because they are not supported by the original filed specification.” (Office Action, Page 5) The Examiner made a substantially similar rejection in an Office Action mailed July 29, 2003, in response to which Applicant indicated example portions of Applicant's originally-filed Specification that disclose the limitations to which the Examiner refers. (*See* Response mailed September 11, 2003) In the current Office Action, the Examiner states, “[T]he Examiner found nowhere in the specified pages that define the metes and bounds of the claimed first or second schema. Furthermore, there is only one schema - ‘A SCHEMA’ . . . depicted in the logical flow of the specified Fig. 6. Moreover, none of the steps of the figure 6 differentiates the claimed ‘a first product classification schema’ and ‘a second product classification schema’ from the illustrated ‘A SCHEMA’ of figure 6.” (Office Action, Pages 5-6) Applicant respectfully disagrees and discusses Claim 1 as an example.

In particular, the claimed first and second schemas are disclosed in the Specification. For example, the following excerpts from Applicant's Specification, particularly when read in combination, clearly provide support for the claimed first and second schemas.

- A buyer 20 may search for a product matching certain product attribute values available from a seller matching certain seller attribute values using GCD 42 and thus eliminate or reduce the need for buyer 20 to individually search numerous seller databases 32 to find the desired product available from a suitable seller. GCD 42 provides access to product and/or seller data relating to these numerous products using directory structure 44,

¹ *See Superguide Corp. v. DirecTV Enters., Inc.*, 2004 WL 253013, at *3 (Fed. Cir. 2004) (stating that the specification of a patent cannot be used to import limitations into a claim that are not recited in the claim to narrow or otherwise change the ordinary meaning of a claim term).

which organizes products using a hierarchical, object-oriented classification system. Buyer 20 may navigate or search directory structure 44 to find a particular classification of products and various information associated with the products within this classification, initiate a search of databases 32 including product and/or seller data relating to a product, and then communicate with an appropriate database 32 through GCD server 40 or otherwise. Such access to vast numbers of products is provided without the requirement that all data about the products and/or sellers be stored in a global database. Instead, this data may be stored in seller databases 32 that can be readily accessed using GCD 42. (Page 15, Lines 1-14)

- [O]ne issue associated with the use of GCD 42 is that GCD 42 may use a schema that is not desired by a particular buyer 20 (for the example, the buyer 20 may desire the use of a schema that is tailored to the buyer's industry). However, as described above, this issue may be addressed by translating a schema provided by GCD 42 into the desired schema. Another issue associated with the use of GCD 42 is that since various types of seller databases 32 are associated with GCD 42, even though these databases 32 may include product data for the same type of product (for example, felt-tip pens), the databases 32 may identify the products using different attribute values, use different names for the same product attribute value, and/or quantify or distinguish product attribute values differently (using different units of measurement, for example). The same may be true for seller data that may be contained in databases 32 (Page 20, Lines 16-27)
- Many of these issues may be solved using techniques that identify product and/or seller data in a seller database 32 and properly associate this data with GCD 42 based on the ontology used in a particular schema of GCD 42. If the ontology of the data that is to be associated with GCD 42 is known and understood, then a mapping may be created (manually or automatically) between the ontologies of the data to be associated and the GCD schema. For example, if the *tip size* attribute in the ontology of "pens" class 58 of directory structure 44 is known to correspond to the vales in a *tip width* column of a table of product data to be associated, then this column may be mapped to the *tip size* attribute and/or "pens" class 58. For instance, the *tip width* column may be identified using a pointer or the *tip width* attribute may be associated with the *tip size* attribute in GCD 42 so that searches for particular values of *tip size* will cause searches for particular values of *tip width* in the relevant table. However, if the ontology associated with the data to be associated is not known, a number of techniques may be used to identify data in one or more tables of a seller database 32, or other data source and to associate this data with one or more classes of GCD 42 according to the ontology of a particular schema used by GCD 42. The various techniques may be implemented as software that is included in data association module 39. Data association module 39 may be implemented as any appropriate combination of

software and/or hardware operating on one or more computers. (Page 21,
Lines 7-25)

FIGURE 6 of Applicant's Specification describes a method of associating product data with a schema of GCD 42. As can be seen from the above excerpts from Applicant's Specification, the product data (i.e. referred to as "target data" in the description of FIGURE 6) may be associated with one or more ontologies, which may be known or unknown, that are different than (or at least distinct from) the ontology used in a particular schema of GCD 42. Thus, it is implicit that the target data may be associated with a schema that is different (or at least distinct from) the particular schema of GCD 42. Applicant respectfully directs the Examiner's attention to the Specification at Page 9, lines 1-6; Page 20, line 28 through Page 21, line 26; and Page 21, line 26 through Page 28, line 25, describing example operation of the data association module. In addition, an example description of a product classification schema appears at least at Page 9, line 1 through Page 10, line 25. Applicant emphasizes that this is merely an example schema.

For at least these reasons, Applicant respectfully submits that Claims 1-37 comply with 35 U.S.C. § 112, first paragraph, and that the claimed first and second classification schemas do not constitute new matter. Thus, Applicant respectfully requests reconsideration and allowance of independent Claims 1, 12, 23, and 34-37, and their respective dependent claims.

III. The Claims are Allowable over the Proposed *Chipman-McComb* Combination

The Examiner rejects Claims 1, 12, 23, and 34 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,038,668 to Chipman et al. ("*Chipman*"). Applicant respectfully disagrees.

A. The Examiner Again Improperly Failed to Consider at least Certain of Applicant's Amendments and Arguments

At the outset, Applicant notes that despite the fact that an Examiner rejects certain claims as allegedly including new matter, "[t]he examiner should still consider the subject matter added to the claim in making rejections based on prior art since the new matter rejection may be overcome by applicant." M.P.E.P. § 2163.06.I. In the present application, the Examiner rejected Claims 1-37 as allegedly including new matter (i.e. as failing to satisfy

the written description requirement). (*See* Office Action, Pages 5-6) In view of this rejection, the Examiner did not consider at least certain of the amendments made to Claims 1-37 in a Response mailed September 11, 2003, when rejecting these claims in the current Office Action. For example, rather than specifically addressing Applicant's arguments and amendments by pointing out where the references allegedly disclose certain limitations recited in Applicant's claims, the Examiner merely states, "Because the claimed provision of 'a first product classification schema' and 'a second product classification schema' are considered new matters, as such, the examiner is not treating the features as claimed under either 35 U.S.C. § 102 or 103 art rejections." (Office Action, Page 6)

First, Applicant respectfully submits that Claims 1-37 are clearly enabled by the Specification, as discussed above.

Second, Applicant respectfully submits that the Examiner's response clearly does not comply with M.P.E.P. § 2163.06.I.² Thus, Applicant respectfully submits that if the Examiner does not issue a Notice of Allowance in reply to this Response, it would be inappropriate for the Examiner to issue a Final Office Action in reply to this Response, without first issuing, at a minimum, an Office Action that includes a consideration of the amendments made by Applicant in the Response mailed September 11, 2003, and an indication of where the limitations recited in those amendments are allegedly disclosed in the references.

B. The Proposed *Chipman-McComb* Combination Fails to Support the Obviousness Rejections of Applicant's Claims

Chipman, whether considered alone, in combination with *McComb*, or in combination with knowledge generally available to those of ordinary skill in the art at the time of

² Additionally, according to 37 C.F.R. § 1.112, after a reply by Applicant to a non-final Office Action, the application will be *reconsidered and again examined*. By not considering certain of Applicant's amendments presented in the Response mailed September 11, 2003, the Examiner did not reconsider and again examine the Application, including all amendments to Applicant's claims, as required under 37 C.F.R. § 1.112. Furthermore, Applicant notes that "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and *answer the substance of it*." M.P.E.P. § 707.07 (f) (emphasis added). Applicant respectfully submits that the Examiner has not answered the substance of Applicant's arguments with respect to the allowability of the amended claims over the references. Instead, the Examiner merely stated that certain amended portions recite new matter and would not be considered in the rejections based on the references.

invention fails to disclose, teach, or suggest various limitations recited in Applicant's claims. Applicant discusses Claim 1 as an example.

1. *Chipman* Fails to Disclose, Teach, or Suggest Various Limitations Recited in Claim 1

Chipman fails to disclose, teach, or suggest at least the following limitations recited in Claim 1:

- determine one or more classes of the first schema with which at least a portion of the target data should be associated ***based on an automatic comparison***, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and
- associate the at least a portion of the target data with one or more classes of the first schema ***in response to determining, based on the automatic comparison***, the one or more classes of the first schema with which the at least a portion of the target data should be associated.

In contrast, *Chipman* discloses a networked catalog search, retrieval, and information correlation and matching system, which allows suppliers to publish information in electronic catalogs and structure the information in an object-oriented representation distributed across a network of computers. (Abstract) According to *Chipman*, a scanning engine scans computers having accessible pages to locate all pages having ***the predefined organizational structure*** as including class, attribute, and methods information. (Column 3, Lines 27-30) To enable each information supplier to provide requisite information on its pages, a "sector" portal establishes common terms (class, attribute, and method names) for the suppliers and consumers to use. (Column 4, Lines 9-12) Thus, with *Chipman*, an information supplier must use common, predefined terms in order to supply information to the portal. *Chipman* further states, "The sector portal is so named because each industry sector is contemplated to have at least one governing portal from which all other portals in that industry sector derive their common vocabulary, taxonomy, or ontology." (Column 4, Lines 12-16)

To provide information to portal 102, suppliers 104 and 105 encode their pages using a predefined protocol. Use of the protocol encourages placing available information in an organized format. The protocol may include tag codes, which describe the information contained therein. (Column 6, Lines 7-12) A tag (e.g., <UC*>, where "*" may include

additional tags) is the identifier to the portal that a page is in an organizational format usable by the portal. (Column 6, Lines 27-29) A web crawler associated with the portal periodically scans the web for pages and parses the pages. (Column 7, Lines 17-19) The parsed pages containing a usable organization structure (e.g., identified as including the <UC*> tags) are stored in a knowledge base for indexing and future retrieval. (Column 7, Lines 20-23) A portal as disclosed in *Chipman* also includes a protocol translator that facilitates supplier publication of HTML pages that are compliant with the protocol and the industry common vocabulary or ontology. (Column 8, Lines 42-45)

According to *Chipman*, the supplier of information may be a high-end supplier or a low-end supplier, each type submitting information to the portal in a different way. In the case of a low end supplier (who lacks the capability or desire to support organized pages locally), pages 307 are retrieved from the portal, pages 307 including at least one template for populating and submitting back onto web 101. (Column 8, Lines 51-57) Template pages 307 include at least one initial set of class, attribute, and method identifiers for population. (Column 8, Lines 58-60) Thus, the supplier posts information by simply filling out a predefined template that identifies what supplier information corresponds to each of the class, attribute, and method entries.

In the example provided in *Chipman*, a supplier may request from the portal the design template for electric motors, and in reply, the protocol translator may retrieve the desired class/subclass, attribute, and method ontologies. The ontologies are translated into an HTML form and sent to the supplier's Internet browser as template pages, which the supplier then populates (with supplier information) as completed pages. The completed pages are forwarded back to the portal where the pages are parsed and added to the knowledge base. (See, Column 8, Line 60 through Column 9, Line 3) Thus, the parser of the portal knows exactly what information corresponds to class, attribute, and method, respectively, because the supplier of the information merely filled in a template.

Alternatively, a high-end supplier according to *Chipman* has the capability to publish its own protocol-compliant pages. (Column 10, Lines 21-22) However, the high-end supplier is still simply filling in a predefined template. According to *Chipman*, a supplier requests a

template page, which may be transferred to the protocol translator where the template page is combined with data (class, method, attribute, etc.) specifying the supplied products and processes from the supplier. (Column 10, Lines 26-30)

Thus, at best, *Chipman* allows an information supplier to submit information in a predefined template (i.e. tagged in a particular, predefined way) to be published and searched. The only mapping between the supplier's information and the predefined ontologies at the portal that occurs is when the supplier manually looks at the template to determine what information should be tagged "class," what information should be tagged "attribute," and what information should be tagged "method."

In contrast to Applicant's recited data association module, *Chipman* requires ***human action to determine what supplier information should be input into the template as each of class, attribute, and method.*** Furthermore, *Chipman* fails to disclose, teach, or suggest a data association module operable to "determine one or more classes of the first schema with which at least a portion of the target data should be associated ***based on an automatic comparison, without translating the target data from the second schema to the first schema,*** between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema." There simply is no such "comparison" disclosed in *Chipman*, much less the "automatic comparison" recited in Claim 1, because the system in *Chipman* does not need such a comparison. A supplier in *Chipman* merely fills out a predefined template, which specifies what information is a class, what information is an attribute, and what information is a method, to make the supplier's information available to the portal (and to other users via the web). The system of *Chipman* does not need to look at what information the supplier is actually submitting, because the supplier has labeled the submitted information by placing it in a particular portion of the template.

The Examiner compares a Tool Suite disclosed in *Chipman* to certain limitations recited in Claim 1. (Office Action, Page 7) However, Applicant respectfully submits that the tools discussed in the cited portion of *Chipman* are unrelated to these limitations. Certain users of the system disclosed in *Chipman* may search supplier-provided information for

components to be included in end products. For example, the tools may include a requirements integration and verification tool, which assures that assembled design objects (end items) meet individual requirements and comply with predefined rules. (Column 13, Lines 43-46) As another example, the tools may include an affordability monitor, which determines if the cost of the included items and the processes required for a combination of items exceeds predetermined budgets. (Column 13, Lines 46-48). However, nowhere do these tools "determine one or more classes of the first schema with which at least a portion of the target data should be associated ***based on an automatic comparison, without translating the target data from the second schema to the first schema***, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema," as recited in Claim 1.

Moreover, because *Chipman* fails to disclose, teach, or suggest the recited "an automatic comparison" or even a "comparison," *Chipman* necessarily fails to disclose, teach, or suggest a data association module operable to "associate the at least a portion of the target data with one or more classes of the first schema ***in response to determining, based on the automatic comparison***, the one or more classes of the first schema with which the at least a portion of the target data should be associated," as recited in Claim 1.

2. *McComb* is Inadequate as a Reference

The Examiner now acknowledges, and Applicant agrees, that *Chipman* does not "specifically disclose the technique of determin[ing] an association of the claimed target value of the product schema happen[ing] without translating the target data from a schema to other object." (See Office Action, Page 8) However, the Examiner argues that *McComb* does disclose these limitations.

Applicant respectfully disagrees for at least three reasons. First, *McComb* is not analogous art and thus may not properly be used to reject Applicant's claims. Second, even if *McComb* could properly be considered analogous art, the required teaching, suggestion, or motivation to combine *McComb* with *Chipman* would still be lacking. Third, even if *McComb* could properly be considered analogous art and also could properly be combined

with *Chipman*, the proposed combination would still fail to disclose, teach, or suggest each and every limitation specifically recited in Claim 1, for example.

i. *McComb* is Non-analogous Art

First, Applicant respectfully submits that *McComb* is non-analogous art. For at least this reason, the proposed *Chipman-McComb* combination is improper.

McComb merely discloses Organicware applications for computer systems. In particular, *McComb* discloses a method for implementing a software application by storing an essential description of the application as data apptoms in a persistent store. (Column 3, Lines 41-43) The apptoms are instantiated as proxy objects at run time, and the proxy objects are connected in such a manner so as to have a fully-functional software application. (Column 3, Lines 43-46) In this manner, according to *McComb*, changes the application are made by data entry rather than programming, eliminating the need for application programming and application system testing. (Column 3, Lines 46-49) According to *McComb*, the present invention [disclosed in *McComb*] solves the limitations of the prior art "by shifting all the definition of an application into data, which need not be translated to code to be run, which is run by code which remains the same from application to application." (Column 3, Lines 36-40)

McComb has absolutely no relation to product classification schemas, let alone "associating target data with a product classification shema," "a first product classification schema," "accessing target data to be associated with the first [product classification] schema," and the many other limitations recited in Claim 1 related to product classification schemas. Therefore, *McComb* is non-analogous art and cannot properly be applied against Applicant's claims. The rejected claims are allowable for at least this reason.

The Examiner must determine what is analogous art for purposes of the obviousness analysis with respect to the subject matter at issue. M.P.E.P. § 2141.01(a). "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24

U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992). A reference in a different field may be reasonably pertinent only if "it is one which because of the matter with which it deals, logically would have commended itself to an inventor's attention when considering his problem." *In re Clay*, 966 F.2d 656, 659, 23 U.S.P.Q.2d 1058, 1061 (Fed. Cir. 1992). Since *McComb* does not mention or even remotely allude to a product classification schemas, much less to associating target data with a product classification schema, *McComb* is not in Applicant's field of endeavor and certainly would not have "commended itself" to Applicant when considering the problem addressed by Applicant's invention. Thus, *McComb* cannot properly be used as a reference against Applicant's claims, and these rejections cannot properly be maintained.

ii. The Proposed *Chipman-McComb* Combination is Improper

Second, even assuming for the sake of argument that *McComb* could be considered analogous art, which Applicant disputes, and even if it would have been technologically possible to in some way combine the teachings of *Chipman* and *McComb*, which Applicant also disputes, these rejections would still be improper because the Examiner has not shown the required teaching, suggestion, or motivation in *Chipman*, *McComb*, or knowledge generally available to those of ordinary skill in the art at the time of the invention to combine *McComb* with *Chipman* in the manner the Examiner proposes. The rejected claims are also allowable for at least this reason.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. *See* 35 U.S.C. § 103(a). Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed below, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some

suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations." M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant's disclosure. *See Id.* (citations omitted). "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.³ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916

³ Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the Federal Circuit noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, the court requires the Examiner to show a sufficient motivation in the prior art to combine the references that allegedly create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining that the required evidence of such

a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

With respect to the Examiner's proposed combination of *McComb* with *Chipman*, the Examiner states, "Thus, with the teachings of Chipman and McComb in front of him/her, it would have been obvious for an ordinarily skilled artisan to modify Chipman's verification tool package with the technique taught by McComb, because by doing so, the modified system can adapt to provide new functionality without delays and cost imposed by a software verification, therefore result[ing] in a reliable system that can be run from one application to another [see McComb: col. 3, lines 18-22, lines 36-40]." (Office Action, Page 8) Applicant respectfully disagrees.

Nothing in *Chipman*, *McComb*, or knowledge generally available to those of ordinary skill in the art at the time of the invention teaches, suggests, or motivates in any way the proposed combination of the networked catalog search, retrieval, and information correlation and matching system disclosed in *Chipman* with the software verification techniques disclosed in *McComb*.⁴ The Examiner's speculation that "it would have been obvious" at the time of the invention to combine the teachings of *Chipman* with *McComb* to allegedly achieve Applicant's invention, in hindsight with the benefit of Applicant's claims as a roadmap for selecting portions of multiple references (at least one of which is non-analogous art or at a minimum is of questionable applicability), is clearly insufficient under the M.P.E.P. and governing Federal Circuit case law.

⁴ Applicant requests that if the Examiner relies on "common knowledge" or "well known" art to combine the references, the Examiner provide a reference in support of this position pursuant to M.P.E.P. § 2144.03, or if the Examiner relies on personal knowledge to supply the required teaching, suggestion, or motivation to combine, the Examiner provide an affidavit supporting such facts pursuant to M.P.E.P. 2144.03.

The Examiner's proposed motivation has no bearing on Applicant's claims. The Examiner did nothing more than propose an alleged advantage (and one which Appellants do not admit could even be achieved by combining these references in the manner the Examiner proposed) of combining *Chipman* with *McComb*. The Examiner did not point to any relevant portions of either *Chipman* or *McComb* that would teach, suggest, or motivate one of ordinary skill in the art at the time of invention to incorporate the networked catalog search, retrieval, and information correlation and matching system disclosed in *Chipman* with the software verification techniques disclosed in *McComb*. It certainly would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to even attempt* to incorporate into the networked catalog search, retrieval, and information correlation and matching system disclosed in *Chipman* such software verification techniques as those disclosed in *McComb*. Even more clearly, it certainly would not have been obvious to one of ordinary skill in the art at the time of the invention, based solely on the prior art, *to actually* incorporate into the networked catalog search, retrieval, and information correlation and matching system disclosed in *Chipman* such software verification techniques, which would be required to establish a *prima facie* case of obviousness under the M.P.E.P. and the governing Federal Circuit case law.

Furthermore, strongly teaching away from the alleged obviousness of the proposed combination is the fact that the software verification techniques disclosed in *McComb* would have absolutely no apparent applicability to the networked catalog search, retrieval, and information correlation and matching system disclosed in *Chipman*. Indeed, Applicants respectfully submit that one of ordinary skill in the art at the time of the invention would have been unable to combine the teachings of these references technologically, even if he or she was tasked with doing so. Thus, even putting aside the issue of whether the proposed combination of *McComb* with *Chipman* would be proper, the inability to properly combine *McComb* with *Chipman* is fatal to these rejections.

iii. *McComb* Fails to Make up for the Deficiencies of *Chipman*

Third, even assuming for the sake of argument that *McComb* was analogous art, and that there was the required teaching, suggestion, or motivation to combine *Chipman* with *McComb* in the manner the Examiner proposes, the proposed *Chipman-McComb*

combination would still fail to disclose, teach, or suggest each and every limitation specifically recited in Claim 1 because *McComb* fails to make up for the example deficiencies of *Chipman*, which are discussed above.

In large part, because *McComb* simply has nothing to do with “product classification schemas,” let alone associating target data with a product classification schema,” as recited in Claim 1, *McComb* necessarily fails to disclose, teach, or suggest at least the following limitations recited in Claim 1:

- determine one or more classes of the first schema with which at least a portion of the target data should be associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema; and
- associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated.

In contrast, *McComb* merely discloses a method for implementing a software application by shifting all the definitions of an application into data, which need not be translated to code to be run, but which is run by code that remains the same from application to application. (Abstract) Applicant assumes that the Examiner is relying on the language “which need not be translated to code to be run” in attempting to apply *McComb* to Applicant’s claims. However, the lack of translating application data to code as disclosed in *McComb* is entirely unrelated to “determin[ing] one or more classes of the first schema with which at least a portion of the target data should be associated based on an automatic comparison, without translating the target data from the second schema to the first schema, between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema” and “associat[ing] the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data should be associated,” as recited in Claim 1 for example. Thus, *McComb* fails

to disclose, teach, or suggest at least these limitations recited in Claim 1 and therefore fails to make up for the deficiencies of *Chipman*.

3. Conclusion with Respect to the Obviousness Rejections

For at least these reasons, the proposed *Chipman-McComb* combination fails support the obviousness rejection of independent Claim 1. Thus, Applicant respectfully requests reconsideration and allowance of independent Claim 1 and its dependent claims. For analogous reasons, Applicant respectfully requests reconsideration and allowance of independent Claims 12, 23, and 34-37 and their dependent claims.

IV. No Waiver

All of Applicant's arguments and amendments are without prejudice or disclaimer. Additionally, Applicant has merely discussed example distinctions from the various references cited by the Examiner. Other distinctions may exist, and Applicant reserves the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicant are sufficient to overcome the Examiner's rejections.

Conclusion

Applicant has made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicant respectfully requests full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicant, at the Examiner's convenience at (214) 953-6812.

Applicant believes no fees are due; however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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